Claims

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- 1. An optical measurement instrument for measuring samples, comprising a first illumination source for excitation of a sample in a first measurement mode a detector for measuring emission from a sample, a selectable first optical module for guiding the excitation beam to the sample, **characterized** in that it comprises a second illumination source for excitation of a sample in a second measurement mode and a selectable second optical module for guiding the excitation beam to the sample, wherein the excitation light beams from the first and second illumination sources are directed to the first and second optical modules in different angles.
- 2. An instrument according to claim 1, **characterized** in that the first measurement mode is for measuring photoluminescence.
- 3. An instrument according to claim 1, **characterized** in that the second measurement mode is for measuring Amplified Luminescent Proximity Homogeneous Assay.
- 4. An instrument according to claim 1, **characterized** in that said first and second optical modules comprise a mirror for reflecting the excitation beam to the sample, wherein the mirrors of the first and second optical modules are in different angles.
- 5. An optical measurement instrument for measuring samples, comprising a first illumination source for excitation of a sample in a first measurement mode a detector for measuring emission from a sample, a selectable first optical module for guiding the excitation beam to the sample, **characterized** in that it comprises a second illumination source for excitation of a sample in a second measurement mode and a selectable second optical module for guiding the excitation beam to the sample, wherein the second optical module and/or the first optical module comprises means for adjusting the focus for a shorter distance between the second optical module and the sample than between the first optical module and the sample.
- 6. An instrument according to claim 5, **characterized** in that it said means is an additional lens towards the sample in the second optical module.
 - 7. An instrument according to claim 5, **characterized** in that the instrument comprises a measurement head including said optical module, an assay including

said sample, and a thermo plate with a regulated temperature, wherein in said second measurement mode the thermo plate is placed closely between the measurement head and the sample assay.

- 5 8. An instrument according to claim 5, **characterized** in that the first measurement mode is for measuring photoluminescence.
- 9. An instrument according to claim 5, **characterized** in that the second measurement mode is for measuring Amplified Luminescent Proximity 10 Homogeneous Assay.